DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MISCELLANEOUS INVESTIGATIONS SERIES
MAP I-1460

Azimuthal Equidistant projection
POLAR MAP SCALE 1:60,192,000
(along meridians only)
1000 500 0 1000 2000 Kilometers

Azimuthal Equidistant projection
POLAR MAP SCALE 1:60,192,000
(along meridians only)
1000 500 0 1000 2000 Kilometers

Base by U.S. Geological Survey, 1983

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—1983—G82315

1000 800 600 400 200 0 1000 2000 3000 Nautical Miles
1000 800 600 400 200 0 1000 2000 Statute Miles
1000 800 600 400 200 0 1000 2000 3000 Kilometers

Van der Grinten projection
SCALE 1:40,053,700
(along equator only)

Boundary and names representation are not necessarily authoritative

THE MAGNETIC FIELD OF THE EARTH, 1980

MAGNETIC VERTICAL INTENSITY

Compiled by
E. B. Fabiano, N. W. Peddie, and A. K. Zunde
1983

EXPLANATION

MAGNETIC VERTICAL INTENSITY

Red lines indicate the value of the vertical intensity of the Earth's magnetic field in units of thousands of nanotesla (*30 = 30,000* nanotesla *= 30,000* gammas). The symbol x indicates a local minimum or maximum.

ANNUAL CHANGE IN MAGNETIC VERTICAL INTENSITY

Blue lines indicate the estimated rate of change in units of nanotesla per year (*1* nanotesla *= 1* gamma). Negative values denote decreasing intensity. The symbol x indicates a local minimum or maximum.

NOTE

This map is one of a series of five World maps showing contours of various elements of the Earth's magnetic field at sea level. The series consists of declination, inclination, horizontal intensity, vertical intensity, and total intensity, all for the year 1980. The information on the Earth's magnetic field was derived from IGRF 1980, the International Geomagnetic Reference Field for 1980, a mathematical model consisting of solid internal spherical harmonics up to the tenth degree and order.

ACKNOWLEDGMENTS

The National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, and the magnetic observatory and field survey personnel of the U.S. Geological Survey provided much of the data essential for the development of this series of maps.

REFERENCES

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For sale by the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202, and Branch of Distribution, U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225